

**Torres, F. E. Magarinos.**

Justificação das normas de chuva da rede pluviométrica Brasileira. Rio de Janeiro. 1926. 14 p. 27½ cm.

**U. S. Coast and geodetic survey.**

Climate map of the Philippine Islands showing seasons and rainfall. Prepared by the U. S. Coast and geodetic survey from data furnished by the Philippine weather bureau from observations up to 1925. n. p. n. d. 1 sheet. 35½ x 45½ cm.

**U. S. Hydrographic office.**

Storm warning signals of the maritime countries of the world. Washington. 1925. 3 sheets. figs. 66½ x 96½ cm.

**Uruguay. Instituto meteorológico nacional.**

Eclipses de sol del 3 de Diciembre de 1918 y 29 de Mayo de 1919. Montevideo. 1920. 93 p. plates (part fold.) ~ 28½ cm.

Servicio semafórico. Montevideo. n. d. 2 sheets. illus. 41½ x 59 cm.

**Uruguay. Observatorio nacional.**

[Rainfall maps.] Años 1914 a 1924. n. p. n. d. [8 sheets.] 59 x 74½ cm.

**Watt, R. A. Watson.**

Directional recording of atmospherics; and An instantaneous direct-reading radiogoniometer, by R. A. Watson Watt and J. F. Herd. p. 596-622. figs. 28 cm. (Repr.: Journ. Inst. elec. engin., vol. 64, no. 353, May 1926.)

**Wegener, Alfred Lothar.**

Origin of continents and oceans. Trans. from the 3d German edition by J. G. A. Skerl. New York. [1924] xx, 212 p. illus. (incl. maps). diagrs. 23 cm.

**Widney, R. M.**

Earth's aerial storm tides . . . Los Angeles. c 1926. 17 p. illus. 16 cm.

**Wright, John Kirtland.**

Geographical lore of the time of the crusades; a study in the history of mediaeval science and traditions in western Europe. New York. 1925. xxi, 563 p. illus. (incl. maps). 21 cm. (Amer. geogr. soc. Research ser., no. 15.) [Meteorology, p. 166 fig.]

**RECENT PAPERS BEARING ON METEOROLOGY**

The following titles have been selected from the contents of the periodicals and serials recently received in the library of the Weather Bureau. The titles selected are of papers and other communications bearing on meteorology and cognate branches of science. This is not a complete index of all the journals from which it has been compiled. It shows only the articles that appear to the compiler likely to be of particular interest in connection with the work of the Weather Bureau.

**American motorist, Washington, D. C. v. 18. September, 1926.**

Cutlip, James E. Read 'em before they weep. What cloudland reveals to the touring motorist. p. 12-13; 40; 42.

**Annalen der Hydrographie und maritimen Meteorologie. Berlin. 54. Jahrgang, Mai 1926.**

Ahlgrimm, Fr. Versuche zur drahtlosen Bildübertragung der Ozeanwetterkarte an Schiffe auf dem Atlantischen Ozean. p. 205-206. [Describes radio transmission of a weather map of the Atlantic Ocean from Deutsche Seewarte to ship in midocean, April, 1926.]

Möller, Beobachtungen oberer Wolken in den Passatgegenden des Atlantischen Ozeans in den Jahren 1903 und 1904. p. 201-203.

Peppler, W. Die Temperaturverhältnisse bei Seerauch über dem Bodensee. p. 198-201.

Schostakowitsch, W. B. Über den Auf- und Zugang der Flüsse. p. 194-198.

**Archives des sciences physiques et naturelles. Genève. Mai-juin 1926.**

Jaquierod, Adrien. Influence de la pression sur la marche des montres. p. 94-120.

**Astronomie. Paris. 40. année. Mai 1926.**

Puig, Ignace. Le magnétisme terrestre et les aurores boréales. p. 193-204.

**California citrograph. Los Angeles. v. 11. October, 1926.**

Young, Floyd D. Desert winds and windbreak protection. p. 454; 484-487.

**Discovery. London. v. 7. September.**

Britton, C. The composition of the upper air. p. 317-319.

**Electrical world. New York. v. 88. 1926.**

Golladay, L. R. Arrester tests with the klydonograph. Results of investigations on several station-type autovalve arresters during summer and fall of 1925—Characteristics of lightning discharges observed for storms differing widely in degree of severity. p. 477-479. (Sept. 4.)

Peek, F. W., Jr. Lightning protection. A study of rods and cages with special reference to the minimizing of risk to oil tanks—models used in determining effective systems of protection of areas from direct lightning strokes. p. 572-574. (Sept. 18.)

**Engineering News-Record, New York, v. 97, September 16, 1926.**

Lightning strikes road. p. 447. [Abstr. of article by W. E. Wheat.]

France, Académie des sciences, Comptes rendus, Paris. t. 183. 1926. Deslandres, H. Loi de distribution des orages magnétiques terrestres, et loi correspondante de répartition des régions actives du soleil. p. 165-169. (19 juillet.)

Hubert, Henry. Les mouvements généraux de l'air atmosphérique en Afrique Occidentale. p. 229-231. (19 juillet.)

Moureu, Charles, & Lepape, Adolphe. Titre de l'air atmosphérique en krypton et xénon. p. 171-175. (19 juillet.)

Hubert, Henry. Premières observations relatives aux parasites atmosphériques en Afrique occidentale. p. 368-370. (2 août.)

Guilbert, Gabriel. Sur "l'état brumeux" de l'atmosphère ou "air brumeux." p. 427-429. (17 août.)

Franklin institute. Journal. Philadelphia. v. 202. September, 1926.

Marvin, C. F., & Kimball, H. H. Solar radiation and weather forecasting. p. 273-306.

Geographical journal. London. v. 68. September, 1926. p. 200-225.

Sandford, K. S. Summer in North-East Land, 1924: The climate and surface changes. p. 200-225.

Időjárás. Budapest. v. 30. Május-június 1926.

Hille, Alfred, Die Meteorologie von Gabriel Hevenesy S. J. aus dem Jahre 1728. p. 93-95.

Nagy, Zoltán. Die Sonnenscheinlauer in Budapest 1912-1925. p. 93;

Steiner, L. Das Periodogramm des mittleren jährlichen Luftdrucks in Budapest. p. 92.

Japanese journal of astronomy and geophysics. Transactions and abstracts. Tokyo. v. 3. no. 3. 1925.

Akiyama, Minesaburō. On the origin of the penetrating radiation. p. (12). [Abstract.]

Han'i, Kamezirō. On the diurnal variation of precipitation. p. (24). [Abstract.]

Han'i, Kamezirō. Southerly wind at Nase as an indication of coming rain in Japan. p. (24). [Abstract.]

Han'i, Kamezirō. Visibility observed at Tateno. p. (2). [Abstract.]

Hirata, Tokutarō. Influence of forest upon climate. p. (30). [Abstract.]

Hirata, Tokutarō. On the relation between the evaporation of water and climatic elements. p. (19). [Abstract.]

Horie, Otoya, & Konisi, Tatehiko. Weather folklore. p. (29). [Abstract.]

Horiguti, Yosimi. From a forecaster's note book. p. (17). [Abstract.]

Horiguti, Yosimi. Instability rain caused by juxtaposition of two air currents of different temperatures. p. (22). [Abstract.]

Horiguti, Yosimi. On the prediction of shower. p. (22). [Abstract.]

Horiguti, Yosimi. A possible relation between droughts and sunspots. p. (25). [Abstract.]

Idumi, Matuo. On the relation between the atmospheric pressure in China and the depth of snow at Takata. p. (21). [Abstract.]

Isikawa, Takamu. Note on the atmospheric pressure as an impulsive agent in causing earthquakes and volcanic eruptions. p. (39). [Abstract.]

Isimaru, Yūkiti. Some observations of a typhoon which passed near Naha (Luchow) on July 11, 1924. p. (18). [Abstract.]

Isimaru, Yūkiti. Upper cloud observation during the passage of a typhoon. p. (18)-(19). [Abstract.]

Katutani, Minoru. On the rainfall at Kokota, Idumo. p. (25). [Abstract.]

Kodama, Hirosi. Effects of climatic conditions on the yielding of cocoon. p. (29). [Abstract.]

Konisi, Tatehiko. The origin of swell. p. (32). [Abstract.]

- Japanese journal of astronomy and geophysics*—Continued.
- Konisi, Tatehiko. The origin of typhoons and tropical showers. p. (19). [Abstract.]
- Matukawa, Tetumi. On the position of summer high pressure in the Far East. p. (15). [Abstract.]
- Matuyama, Kinzirō. "Kasumi" that causes turbidity of atmosphere. p. (20). [Abstract.]
- Matuyama, Kinzirō. On hazes. p. (20). [Abstract.]
- Murobusi, Mankiti. On a relation between groaning of telephone wires and weather situations. p. (28). [Abstract.]
- Nukiyama, Daizō. On the height of clouds. p. (21). [Abstract.]
- Ohnisi, N. On seasonal correlation as affected by the sunspot activity. p. (25)–(26). [Abstract.]
- Ohti, Sirō. On freezing of rivers in Korea and southern Manchuria. p. (14). [Abstract.]
- Ohti, Sirō. Snow garland. p. (23). [Abstract.]
- Ohti, Sirō. Why the first snow usually occurs earlier than the first frost in some places. p. (23)–(24). [Abstract.]
- Osio, Takesi. Magnitude of cloud particles calculated from the radii of coronae. p. (20)–(21). [Abstract.]
- Oyama, Teikiti. Mean variability of temperature. p. (13)–(14). [Abstract.]
- Oyosi, Akira. On thunderstorms. p. (19). [Abstract.]
- Sakurai, Ganti. Effects of passing cyclones on wireless waves. p. (13). [Abstract.]
- Sasaki, Turuzō, & Kera, Motohiko. On the prediction of maximum snow depth in Etigo Province. p. (24)–(25). [Abstract.]
- Sekiguti, Rikit. On the lagging of the line of discontinuity in the temperature distribution behind the trough line of a cyclone. p. (17). [Abstract.]
- Sekiguti, Rikit, & Nakano, Kadzuma. On the speed of drifting motion of detached anticyclones of winter, in their relation to the forms of isobars. p. (15). [Abstract.]
- Sekine, Yukio. Test of pilot balloons. p. (15)–(16). [Abstract.]
- Siga, Tetuzi. On the temperature and humidity anomaly on Mt. Unzen. p. (13). [Abstract.]
- Suda, Kwanzi. On the method of observation of groaning of wires. p. (28)–(29). [Abstract.]
- Taguti, Katutosi. On the periodical development of the continental high. p. (14). [Abstract.]
- Taguti, Katutosi. Upper air-currents at Kōbe. p. (16). [Abstract.]
- Takayama, Sirō. On the mode of development of continental highs. p. (15). [Abstract.]
- Takayama, Sirō. On the preferential occurrence of extreme values of some meteorological elements in the night time. p. (17). [Abstract.]
- Takayama, Sirō. Several cases of heavy rains of summer season. p. (21)–(22). [Abstract.]
- Takeda, Hango. Evaporation of water from a pond. p. (20). [Abstract.]
- Tamura, Masanobu. A cold front which passed over Japan on Oct. 15 and 16, 1924. p. (16)–(17). [Abstract.]
- Tamura, Masanobu. Form of frozen rain drops: an experiment on solidification of molten drops during fall. p. (23). [Abstract.]
- Tutumi, Kenroku. Serieulture and weather. p. (29). [Abstract.]
- Tutumi, Kenroku. Some investigations on duration and intensity of rainfall at Nagano. p. (22). [Abstract.]
- Udea, Kyūti. On a statistical method of weather prediction. p. (29). [Abstract.]
- Utumi, Tokutarō. Statistical proof of Okada's law. p. (17)–(18). [Abstract.]
- Uyeno, Mikuma. Direction of cloud movement and rain. p. (25). [Abstract.]
- Yamamoto, Takehiko. A note on squalls at Kōbe. p. (19). [Abstract.]
- Yazaki, Syūkiti. Summer drought in Ise province and the sunspot activity. p. (27)–(28). [Abstract.]
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- Mokrzycki, Gustave. Le coefficient de viscosité des brouillards. p. 188–192.
- Journal of geophysics and meteorology. Moscow. v. 2. no. 3–4. 1925.*
- Berg, E. J. The most notable diurnal maximums of precipitation for the period of thirty years (1886–1915) and its geographical distribution in the European part of U. S. S. R. p. 295–308. [Russian text with English abstract.]
- Journal of geophysics and meteorology*—Continued.
- Federov, E. E. An attempt of studying the monthly weather by means of considering the weather conditions of each separate day. Warm Januaries at Pavlovsk (Slutzk). p. 223–232. [Russian text with English abstract.]
- Figuovsky, I. I. Classification of Weather. p. 203–210. [Russian text with English abstract.]
- Friedmann, A. A. p. 133–136. [Obituary.] [Russian text.]
- Kaigorodov, A. I. Experimental investigation of the cooling in immobile and in moving air. p. 165–181. [Russian text with English abstract.]
- Kalitine, N. N. Régistration au moyen de la méthode photoélectrique de l'intensité de l'éclairage produit par la lumière de l'atmosphère. p. 183–190. [Russian text with French abstract.]
- Keller, L. V. Über die Aufstellung eines Systems von Charakteristiken der atmosphärischen Turbulenz. p. 275–290. [German text with Russian abstract.]
- Kostareva, O. A. The distribution of vertical vortices in a cyclone. p. 211–216. [Russian text with English abstract.]
- Kotchin, N. E. To the theory of atmospheric discontinuities. p. 233–252. [Russian text with English abstract.]
- Maltchenko, E. V. Les averses et l'inundation en Crimée du 10–11 août 1914. p. 191–202. [Russian text with French abstract.]
- Tolksy, A. P. Über die Temperatur der Schneedecke. p. 137–164. [Russian text with German abstract.]
- Literary digest. New York. v. 91. October 9, 1926.*
- Talman, Charles Fitzhugh. Sixteen million thunderstorms. p. 25–26. [Abridgment of syndicate newspaper article issued by Science Service.]
- Marine observer. London. v. 3. 1926.*
- Ashwin, Cecil, & Higgs, W. G. Atmospherics: Origin, range, and directional properties. p. 134–137. (Aug.)
- Cresswell, M. Tides and currents, and the effect of the wind on the water level near the shore with set and drift associated. p. 137–140. (Aug.)
- Thomas, J. L. Northern and southern lights. p. 141–146. (Aug.)
- Garbett, L. G. The Beaufort scales. p. 163–164. (Sept.)
- Keeton, H. Tropical cyclones of the eastern north Pacific. p. 160–163. (Sept.)
- Hennessy, J. Ice of the southern ocean. p. 176–179. (Oct.)
- Meteor. New York. v. 14. 1926.*
- Talman, Charles Fitzhugh. Weather toys. Weather prophets from Toyland. p. 59–60. (Aug.)
- Frazer, Calvin. Hot and cold weather. p. 52–53. (Oct.)
- Talman, Charles Fitzhugh. Maury—pathfinder of the seas. p. 40. (Oct.)
- Meteorological magazine. London. v. 61. August, 1926.*
- Douglas, C. K. M. On some summer depressions. p. 153–156.
- G[old], E. Colonel Francisco S. Chaves. p. 173–174. [Obituary.]
- Myrbach, Otto. The breathing of the continents. p. 166–168. [Abstract.]
- The Rev. Herbert Arnold Boys, F. R. Met. Soc. p. 174–175. [Obituary.]
- Whipple, F. J. W. Abnormal audibility of gunfire. The time of passage of the sound. p. 164–166.
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- Crestani, G. L'accuratezza nelle misure pluviometriche. p. 108–110. (Maggio-giugno.)
- Tamaro, D. Supposti danni e vantaggi reali delle piogge abbondanti e irruenti. p. 121–122. (Maggio-giugno.)
- Borriello, L. L'inverno 1924–1925. p. 64–66. (Marzo-aprile.)
- Ferrara, Gerardo. Il pulviscolo atmosferico e la sua importanza igienico-sociale. p. 67–70. (Marzo-aprile.)
- Ferrajolo, Luigi. Il servizio presagi. Segnali orari e meteoradii. p. 71–73. (Marzo-aprile.)
- Paoloni, B. Il servizio della meteorologia italiana nel viaggio del Norge al Polo. p. 92–100. (Marzo-aprile.)
- Starrabba, F. Stella. Pioggie e vulcani. p. 61–63. (Marzo-aprile.)
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- Bureau, R., & Coyecque, M. Les atmosphériques sur les océans. Étude d'observations faites sur l'Atlantique Nord de novembre 1924 à juin 1925. p. 5–10. (Janvier.)
- Besson, L. Instruction pour l'emploi de la herse néphoscope. p. 64–72. (Février.)

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- Delcambre, E.** Le grand abri fermé démontable de l'Office national météorologique (Modèle O. N. M. 1925). p. 73-76. (Février.)  
**Wehrlé, Ph.** Les noyaux de variation. p. 49-63. (Février.)  
**Henry, M.** Sur un nouvel actinomètre thermo-électrique enregistreur. p. 97-115. (Mars.)  
**Mercanton, L.** Un halo solaire remarquable. p. 118-119. (Mars.)  
**Sanson, J.** L'influence des gelées d'octobre 1925 sur la récolte des raisins en Touraine. p. 125-127. (Mars.)  
**Schereschesky, P.** La première photographie stéréoscopique des nuages, prise en avion. p. 124-125. (Mars.)  
**Wehrlé, Ph.** Sur un cas instructif de scission de perturbation (14-20 novembre 1925). p. 115-118. (Mars.)  
**Baldit, Albert.** Les conditions d'emploi des herses néphoscopiques de modèle réduit. p. 145-165. (Avril.)  
**Papillon, R.** Dispositif pour le transport d'un hygromètre enregistreur. p. 177-178. (Avril.)  
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**Salles, Ed.** Dispositif électrométrique pour la mesure du champ électrique de l'atmosphère. p. 166-168. (Avril.)  
**Sladek.** Traversée d'un orage par un avion. p. 176-177. (Avril.)  
**Brazier, C.-E.** Charles-Alfred Angot. p. 193-196. (Mai.)  
**Charli, C.** Contribution à la météorologie dynamique de l'Afrique du Nord. p. 197-206. (Mai.)  
**Danjon, A., & Couder, A.** Observation télescopique de la structure d'un cirrus. p. 209-210. (Mai.)  
**Mercanton, P.-L.** Cumulus et courants ascendants. p. 206-207. (Mai.)  
**Raymond, G.** Sur une légère modification à faire subir aux thermomètres enregistreurs. p. 208. (Mai.)

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- Schereschesky, Ph.** Observation télescopique de la structure d'un nuage. p. 210-213. (Mai.)  
**Arctowski, Henryk.** Sur le manque de précision des mesures pluviométriques. p. 250-255. (Juin.)  
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**Mellot, Arsène.** Contribution à l'étude de la climatologie de la France. p. 264-277. (Juin.)  
**Rougetet, E.** Sur un cas particulier de brouillard dans la vallée du Rhône. p. 278-279. (Juin.)  
**Sanson, J., & Wehrlé, Ph.** Les pluies du 8 novembre 1925 en Indre-et-Loire. p. 260-263. (Juin.)  
**Vaut, A.** Quelques propriétés des systèmes nuageux dans la région parisienne. Application à la prévision à assez longue échéance. p. 244-249. (Juin.)  
**Aurejac.** Observations en avion faites à Strasbourg. p. 327-330. (Juillet.)  
**Giao, Antonio.** Tourbillons de Bjerknes de petites dimensions. p. 321-326. (Juillet.)  
**Richard, R.** Rapprochement entre différentes mesures de température à l'air libre, à la surface de la neige, et à l'intérieur de la neige. p. 331-335. (Juillet.)  
**Wehrlé, Ph.** L'œuvre d'Hildebrand Hildebrandsson. p. 289-311. [With list of his publications.]  
**Timberman. Portland, Oreg.** v. 26. August 1926.  
**Alexander, George W.** Establishing a weather station in the tall timber. p. 49; 176.  
**Weltall. Berlin.** 25. Jahrgang. Mai 1926.  
**Ahrens, Wilhelm.** Der "Vater der Meteorologie." p. 116-125. [Anecdotes concerning H. W. Dove.]  
**Wetter. Berlin.** 43. Jahrgang. August 1926.  
**Groissmayr, Fritz.** Die Nilslut und der Folgewinter in Deutschland. p. 186-187.

## SOLAR OBSERVATIONS

## SOLAR AND SKY RADIATION MEASUREMENTS DURING SEPTEMBER, 1926

By HERBERT H. KIMBALL, Solar Radiation Investigations

For a description of instruments and exposures and an account of the method of obtaining and reducing the measurements, the reader is referred to the REVIEW for January, 1924, 52:42, January, 1925, 53:29, and July, 1925, 53:318.

TABLE 1.—Solar radiation intensities during September, 1926

[Gram calories per minute per square centimeter of normal surface]

## WASHINGTON, D. C.

Date	Sun's zenith distance										Loca-mean solar time
	8 a.m.	78.7°	75.7°	70.7°	60.0°	0.0°	60.0°	70.7°	75.7°	78.7°	
	75th mer. time										
Sept. 8	mm.	cal.	mm.								
11	11.38	0.61	0.78	1.41	1.41	1.41	1.41	1.41	1.41	12.24	
15	7.87	0.90	1.00	1.18	1.18	1.18	1.18	1.18	1.18	8.18	
17	10.21	0.69	0.86	1.08	1.08	1.08	1.08	1.08	1.08	10.59	
Means	15.65	0.37	0.47	0.57	0.57	0.57	0.57	0.57	0.57	11.81	
Departures	-0.09	-0.05	-0.06	+0.09	+0.03	+0.03	+0.03	+0.03	+0.03	-0.08	

## MADISON, WIS.

Sept. 9	7.29			1.28	1.50	1.28				7.29
10	8.50			1.10	1.27	1.46	1.22			7.04
18	16.79			0.89	1.10	1.10	1.10			16.79
20	10.21			1.41	1.41	1.41	1.41			7.87
25	3.99			1.18	1.31	1.46	1.46			3.45
Means				(1.14)	1.19	1.39	1.23			
Departures				+0.11	+0.02	+0.01	+0.07			

TABLE 1.—Solar radiation intensities during September, 1926—Con.

## LINCOLN, NEBR.

Date	Sun's zenith distance										Local mean solar time
	8 a.m.	78.7°	75.7°	70.7°	60.0°	0.0°	60.0°	70.7°	75.7°	78.7°	
	75th mer. time										
Sept. 6	5.0	4.0	3.0	2.0	1.1.0	2.0	3.0	4.0	5.0	e.	
9	mm.	cal.	mm.	13.61							
10	7.57	1.07	1.20	1.32	1.50	1.25	1.02	0.86	0.71		8.27
10	8.81	0.91	1.02	1.20	1.41	1.05	0.97	0.83	0.71		9.83
25	3.63	1.12	1.24	1.38	1.59	1.36	1.21	1.09	1.00		2.74
Means					1.03	1.14	1.27	1.50	1.22	1.07	0.93 (0.86)
Departures					+0.16	+0.13	+0.08	+0.10	+0.07	+0.09	+0.09 -0.02

<sup>1</sup> Extrapolated.TABLE 2.—Solar and sky radiation received on a horizontal surface  
[Gram-calories per square centimeter of horizontal surface]

Week beginning	Average daily radiation						Average daily departure from normal		
	Washington	Madison	Lincoln	Chicago	New York	Washington	Madison	Lincoln	
1926	cal.	cal.	cal.	cal.	cal.	cal.	cal.	cal.	
Sept. 3	280	288	370	192	270	-112	-88	-67	
10	393	289	325	245	404	+20	-60	-86	
17	317	282	264	242	244	-43	-45	-126	
24	221	209	287	128	142	-126	-97	-83	
Deficiency since first of year on Sept. 30						-3,899	-147	-1,897	